

CLAIMS:

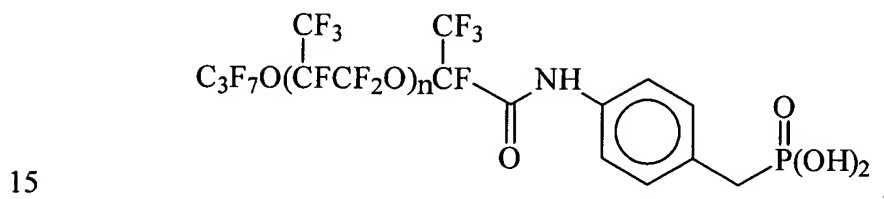
What is claimed is:

1. A method of patterning a device using a phototool comprising:

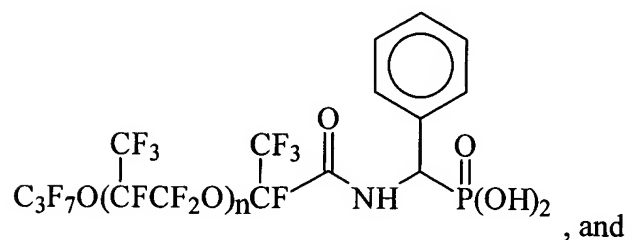
- (a) applying a layer comprising a fluorinated phosph(on)ate material to a first
5 surface of the phototool;
(b) placing the coated first surface of the phototool against the device such that
the layer of fluorinated phosph(on)ate is in contact with the device; and
(c) applying radiation to a second surface of the phototool for affecting a
pattern in the device.

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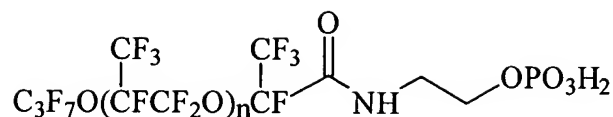
2. The method of claim 1 wherein the fluorinated phosph(on)ate is selected from
the group consisting of



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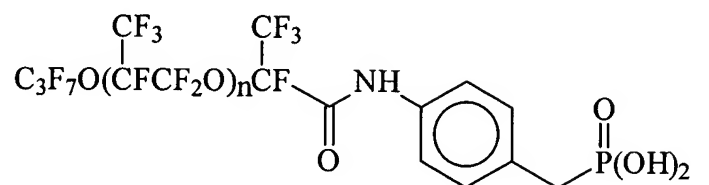


where the value of n ranges from 3 to about 10.

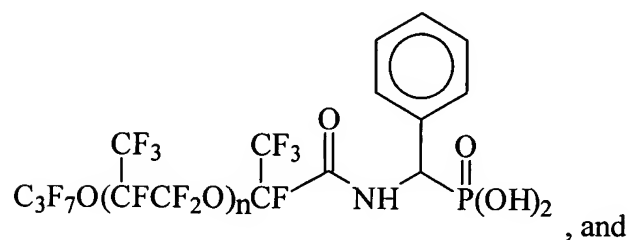
- 5 3. The method of claim 1 wherein the fluorinated phosph(on)ate is poly(hexafluoropropyleneoxide-co-difluoromethylene oxide) alcohol ethoxylated phosphate.
4. The method of claim 1 wherein the thickness of the layer of the fluorinated phosph(on)ate material is less than or equal to about 6 nm.
- 10 5. The method of claim 1 wherein the fluorinated phosph(on)ate is applied using a dilute solution in hydrofluoroether solvent.
- 15 6. The method of claim 5 wherein the dilute solution further comprises a perfluoropolyether silane.
7. The method of claim 1 wherein the fluorinated phosph(on)ate comprises a phosphate group.
- 20 8. The method of claim 1 wherein the fluorinated phosph(on)ate comprises a phosphonate ester, salt, or acid group.
9. The method of claim 1 wherein the fluorinated phosph(on)ate comprises a monophosphate ester.
- 25 10. The method of claim 1 wherein the fluorinated phosph(on)ate comprises a phosphonic acid.

11. A method of creating patterns in a patternable material comprising
(a) applying a layer of a fluorinated phosph(on)ate material to a first surface of a phototool;
- 5 (b) applying photoresist to a surface of the patternable material;
(c) placing the first surface of the phototool in contact with the photoresist;
(d) applying radiation to the phototool to form a pattern in the photoresist;
(e) removing a portion of the photoresist to expose a portion of the patternable material surface; and
- 10 (f) modifying the exposed surface of the patternable material where the photoresist was removed.
12. The method of claim 11 wherein (f) comprises removing material from the exposed surface.
- 15 13. The method of claim 11 wherein (f) comprises adding material to the exposed surface.
14. The method of claim 11 wherein the patternable layer is a dielectric layer.
- 20 15. The method of claim 11 wherein the patternable layer is a metal layer.
16. An article comprising a phototool having transparent portions and opaque portions and having a first and a second surface with a layer of a fluorinated
- 25 phosph(on)ate material on the first surface.
17. The article of claim 16 wherein the first surface of the phototool comprises glass and chrome oxide.

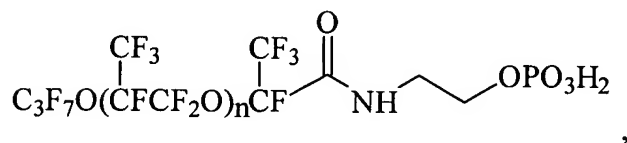
18. The article of claim 15 wherein the fluorinated phosph(on)ate is selected from the group consisting of



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where the value of n ranges from 3 to about 10.

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19. The article of claim 16 wherein the thickness of the layer of a fluorinated phosph(on)ate material is less than or equal to about 6 nm.

20. The article of claim 16 wherein the layer of a fluorinated phosph(on)ate layer further comprises a perfluoropolyether silane.

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21. The article of claim 16 wherein the fluorinated phosph(on)ate is poly(hexafluoropropyleneoxide-co-difluoromethylene oxide) alcohol ethoxylated phosphate.

22. The article of claim 16 wherein the fluorinated phosph(on)ate comprises a phosphate group.

5 23. The article of claim 16 wherein the fluorinated phosph(on)ate comprises a phosphonate ester, salt, or acid group.

24. The article of claim 16 wherein the fluorinated phosph(on)ate comprises a monophosphate ester.

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25. The article of claim 16 wherein the fluorinated phosph(on)ate comprises a phosphonic acid.

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